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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,125	11/29/2000	Masayuki Arai	P20247	9044

7055 7590 09/21/2005

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EXAMINER

HENN, TIMOTHY J

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/725,125

Applicant(s)

ARAI, MASAYUKI

Examiner

Timothy J. Henn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-7 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08 July 2005 has been entered.

Response to Arguments

2. Applicant's arguments filed 08 July 2005 have been fully considered but they are not persuasive. Regarding Applicant's arguments that Brunolli and Ashe, alone or in combination with Arai, Kawahara and Yamamoto fail to disclose a digital potentiometer that varies a wiper position only when a remote diaphragm control signal is input as claimed, the examiner notes that Arai discloses diaphragm control systems including remote control and control of a diaphragm using a potentiometer (Figures 1 and 2). The examiner further notes that Arai discloses a selection between either automatic diaphragm control or remote diaphragm control (Figure 1) wherein switches SW₂, SW₃ and SW₄ are opened and closed in accordance with the control mode. In the remote control mode, SW₃ is closed allowing control signals from the remote control circuit to be used while in automatic mode switches SW₂ and SW₄ are closed allowing the automatic control circuit to be used. Arai further discloses that the diaphragm opens

and closes when the variable resistance increases or decreases according to a an open or close signal or "remote diaphragm control signal" (c. 2, l. 41 - c. 3, l. 2). The examiner notes that a diaphragm control signal (e.g. a change in resistance causing the diaphragm to open or close) would only be output when the remote diaphragm control signal (i.e. open or close signal) is applied to the potentiometer, therefore meeting the "only" limitation as claimed.

In response to Applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 4,651,216) in view of Kawahara et al. (US 5,325,149) in further view of Brunolli et al. (US 6,201,491).

[claim 7]

Regarding claim 7, Arai discloses a diaphragm control apparatus for a lens of a CCTV camera having a diaphragm device that at least one of opens and closes a diaphragm (Figure 1), comprising:

a remote diaphragm control device (Figure 1, "remote control circuit") that selects one of an automatic diaphragm control mode in which the diaphragm is controlled in accordance with an image signal output from the CCTV camera (Figure 1, "automatic control circuit"; Figure 3; c. 2, l. 64 - c. 3, l. 2), and a remote diaphragm control mode in which the diaphragm is set to an optional position in accordance with a remote diaphragm control signal issued from the remote diaphragm control device (Figure 2; c. 2, ll. 41-64);

a diaphragm control signal setting device that is activated when the remote diaphragm control mode is selected by the by said remote diaphragm control device (Figure 1, Item 1), said diaphragm control signal setting device being configured to generate a diaphragm control signal in accordance with the remote diaphragm control signal issued from the remote diaphragm control device (c. 2, ll. 9-64), said diaphragm control signal setting device further being configured to output the diaphragm control signal to the diaphragm driving device to move the diaphragm to a position corresponding to the diaphragm control signal (Figure 1, "driver circuit");

and a power source that supplies electrical power to the diaphragm control signal setting device (the examiner notes that a power source is inherent in electronic systems), said diaphragm control signal setting device comprising a potentiometer (Figure 2, Item VR), said potentiometer varying a wiper position of a variable resistor and outputting said diaphragm control signal only when the remote diaphragm control signal is input when the electrical power is supplied (a signal will inherently only be output when power Vcc is input to the circuit in Figure 2; see arguments above), said

potentiometer maintaining the wiper position of the variable resistor when the remote diaphragm control signal is stopped (Figure 2; c. 2, l. 41 - c. 3, l. 2; i.e. "diaphragm opens as variable resistance increases and stopped down as resistance value decreases"). However, Arai lacks a memory that stores the diaphragm control signal when the electrical power to the diaphragm control signal setting device is interrupted, the diaphragm control signal being output from the memory to set the diaphragm to the optional position when the electrical power is re-supplied.

Kawahara discloses a camera system in which an aperture value or "diaphragm control signal" (The examiner notes that although Kawahara stores an aperture value, since the aperture value of Kawahara causes the driving device to move the diaphragm "to a position corresponding to the diaphragm control signal", it can be interpreted as a diaphragm control signal as claimed) is stored in a memory so that the diaphragm can be forcedly set to the stored value if the power supply is interrupted, allowing diaphragm control to be conducted without error (c. 6, l. 60 - c. 7, l. 32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to store the diaphragm control signal of Arai in order to forcedly set the diaphragm to the state it was in prior to a power interruption so as to allow diaphragm control to be conducted without error. However, Arai in view of Kawahara lacks a potentiometer which is a digital potentiometer.

Brunolli discloses a digital potentiometer which can replace analog potentiometers (e.g. Figure 2, Item VR of Arai) and which is "smaller, more easily and accurately set, are controllable remotely, and are becoming lower in cost" (c. 1, ll. 13-

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17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the potentiometer of Arai with a digital potentiometer as taught by Brunolli to achieve a device which is smaller and more easily and accurately set.

[claim 4]

In regard to claim 4, note that Arai in view of Kawahara in view of Brunolli lacks a memory which is a non-volatile memory. However, it is well known in the art to use non-volatile memories when the data is required to be stored even at times when a power supply is not connected such as when the camera of Arai in view of Kawahara is turned off (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a non-volatile memory as the memory of Arai in view of Kawahara to store data even when the memory does not have a power supply connected to thereto.

[claim 5]

In regard to claim 5, note that Arai et al. in view of Kawahara does not specifically disclose a remote diaphragm control device that is provided separately from the CCTV camera. However, it is well known in the art to locate the remote control device at a separate location from the device to be controlled to allow the user to activate the controlled device without having direct physical access to the controlled device (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the remote diaphragm control device at a separate location from the CCTV camera to allow the user to control the camera without

having direct physical access to the camera.

[claim 6]

In regard to claim 6, note that Arai et al. discloses a diaphragm control apparatus for a lens of a CCTV camera, wherein said CCTV camera lens comprises an automatic control device for outputting a diaphragm control signal based on an image signal of the CCTV camera to the diaphragm driving device to thereby automatically control the diaphragm (Figure 1, "automatic control circuit"), and a switching device for switching an automatic diaphragm control in which the diaphragm is automatically controlled by the automatic control device (Figure 1, Item SW₂, SW₃, SW₄) and a remote diaphragm control in which the diaphragm is controlled by the remote diaphragm control device (Figure 1, "remote control circuit"), said remote diaphragm control device being provided with a switching signal output device for operating the switching device (Column 2, Lines 9-37).

Allowable Subject Matter

5. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

[claim 8]

Regarding claim 8, the prior art does not teach or fairly suggest a memory in a lens device for storing an aperture value in order to restore the aperture to the stored aperture value after power has been restored to the camera. While it is known to

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include memory devices in lenses in order to store information about the capabilities of the lens, providing a memory in the lens device to store the current desired setting of an aperture to restore the aperture to the desired setting after a power interruption is not taught or suggested.

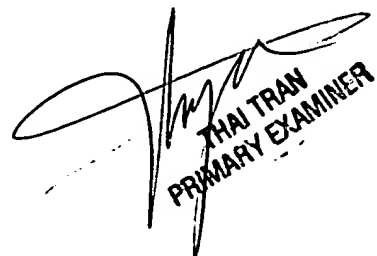
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Henn whose telephone number is (571) 272-7310. The examiner can normally be reached on M-F 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R. Garber can be reached on (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJH



THAI TRAN
PRIMARY EXAMINER